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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/843,915	04/30/2001	Frederik Augustijn	P-8894	9908

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EXAMINER
FAROOQ, MOHAMMAD O

ART UNIT	PAPER NUMBER
2182	8

DATE MAILED: 09/05/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/843,915	Applicant(s) AUGUSTIJN ET AL.	
	Examiner Mohammad O. Farooq	Art Unit 2182	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *11 November 2002* .

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-67* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-17 and 22-63* is/are rejected.

7)☒ Claim(s) *18-21 and 64-67* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

1. Claims 1-17 and 22-63 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kitamura et al. U.S. Pat. No. 5,197,145 in view of DuLac et al. U.S. Pat. No. 4,843,544.

2. As to claim 22, Kitamura et al. teach device comprising:

a controller (control storage; item 23, fig. 4);

at least one sensor (buffer storage controller; item 24, fig. 4) operably connected to the controller for connecting data, wherein the data comprises data from a first data stream and at least one additional data stream (see fig. 3);

a memory transfer unit (memory access controller; item 30, fig. 4) for transferring the data to a memory;

a first intermediate register (buffer storage I; item 13, fig. 3) for collecting first data stream data;

at least one additional intermediate register (buffer storage II; item 14, fig. 3) for collecting additional data stream data; and

at least one output register (move-out buffer I; item 15, fig. 3) for receiving first intermediate register contents.

Kitamura et al. do not teach a processor. DuLac et al. teach a processor (item 12, fig. 1A). However, it would have been obvious to one of ordinary skill in the art at the time of invention to combine the teachings of Kitamura et al. and DuLac et al. because that would better control of data transfers with multiple buffers (col. 2, lines 51-53).

3. As to claims 23, 25, 26 and 31, Kitamura et al. do not teach additional output register for receiving first intermediate register contents, output register receiving additional intermediate register contents, a memory connected to the processor and a converter connected to the processor for converting at least one signal to the data. However, it would have been obvious to one of ordinary skill in the art at the time of invention to modify the teachings of Kitamura et al. to incorporate additional output register for receiving first intermediate register contents, output register receiving additional intermediate register contents, a memory connected to the processor and a converter connected to the processor for converting at least one signal to the data because that would reduce the time necessary for carrying out the data transfer operation (col. 2, lines 41-43).

4. As to claim 24, Kitamura et al. teach an additional output register for receiving additional intermediate register contents (see fig. 3).

5. As to claims 27 and 28, Kitamura et al. teach first and additional intermediate register contents include identification code that uniquely identify first and additional intermediate register contents respectively (col. 4, lines 29-57).

6. As to claims 29 and 30, Kitamura et al. teach first and additional intermediated registers are adapted to store first and additional data stream data (col. 3, lines 28-67, col. 4, lines 1-15).

7. As to claims 4 and 6, Kitamura et al. do not teach storing remaining first and additional intermediate registers contents in first and additional intermediate registers respectively if the output registers associated with them are full. However, it would have been obvious to one of ordinary skill in the art at the time of invention to modify the teachings of Kitamura et al. to incorporate storing remaining first and additional intermediate registers contents in first and additional intermediate registers respectively if the output registers associated with them are full because fast fetching and storing of data in a system (col. 1, lines 9-17).

8. As to claims 9-17, Kitamura et al. do not teach transferring contents to memory, compressed data, collecting first and additional data stream until the registers are full, storing remaining register contents in the registers if the first output register is full and determining a state of the first output register. However, it would have been obvious to one of ordinary skill in the art at the time of invention to modify the teachings of Kitamura et al. to incorporate transferring contents to memory, compressed data, collecting first and additional data stream until the registers are full, storing remaining register contents in the registers if the first output register is full and determining a state of the first output register because that would provide concurrent transfer of data in the system (col. 2, lines 44-65).

9. Method claims 1-3, 5, 7 and 8 have similar limitations as claims 22-31. Kitamura et al. and DuLac et al. in combination teach apparatus as set forth in claims 22-31. Therefore, Kitamura et al. and DuLac et al. also in combination teach method as set forth in claims 1-3, 5, 7 and 8.

10. Apparatus claims 32-46 have similar limitations as method claims 1-17. Kitamura et al. and DuLac et al. in combination teach method as set forth in claims 1-17. Therefore, Kitamura et al. and DuLac et al. in combination also teach apparatus as set forth in claims 32-46.

11. Claims 47-63 have similar limitations as method claims 1-17. Kitamura et al. and DuLac et al. in combination teach method as set forth in claims 1-17. Therefore, Kitamura et al. and DuLac et al. in combination also teach computer program as set forth in claims 47-63.

Allowable Subject Matter

12. Claims 18-21 and 64-67 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mohammad O. Farooq whose telephone number is (703) 305-3888. The examiner can normally be reached on 8:00am - 4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jeffrey A. Gaffin can be reached on (703) 308-3301. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

KIM HUYNH
PRIMARY EXAMINER

9/02/03

Mohammad O. Farooq
September 1, 2003